08:02F 3E06260

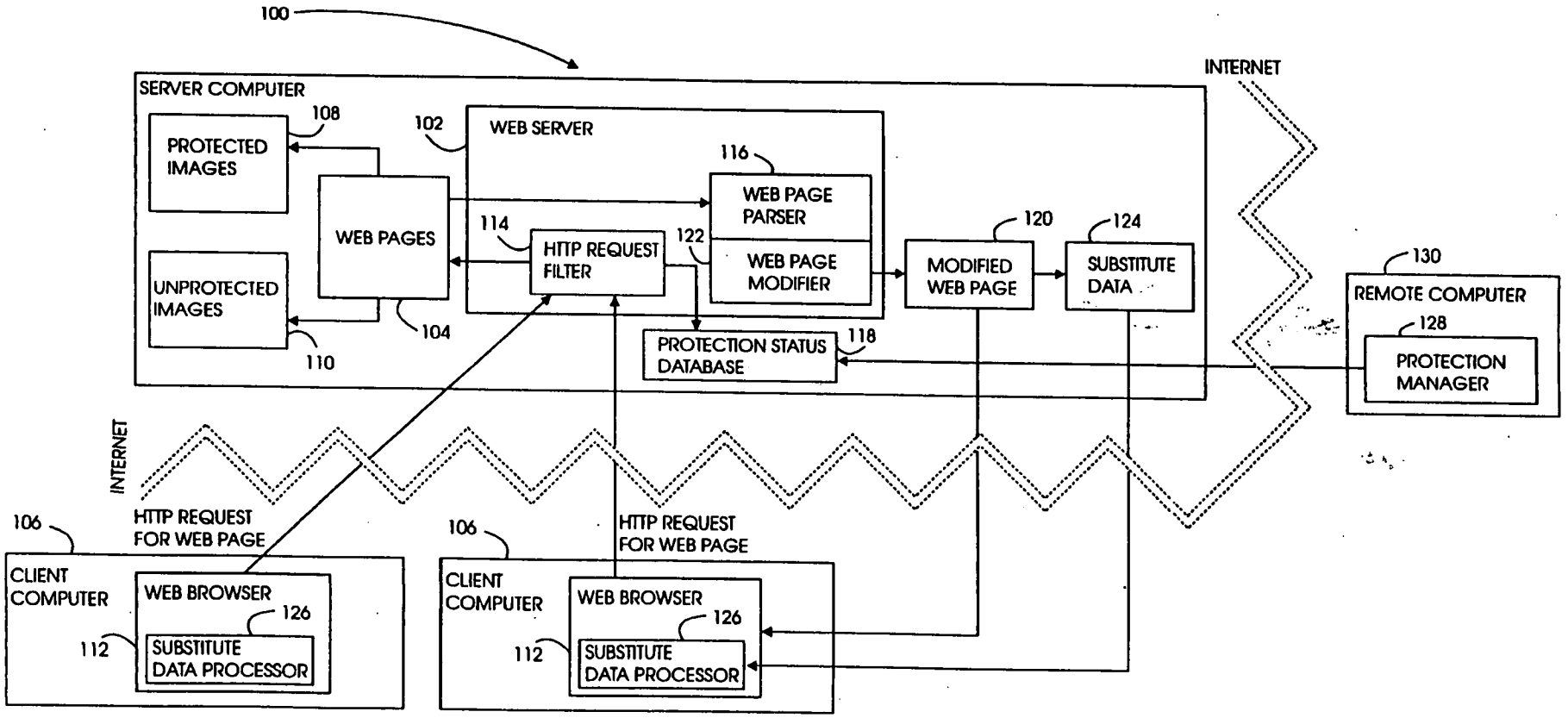

FIGURE 1

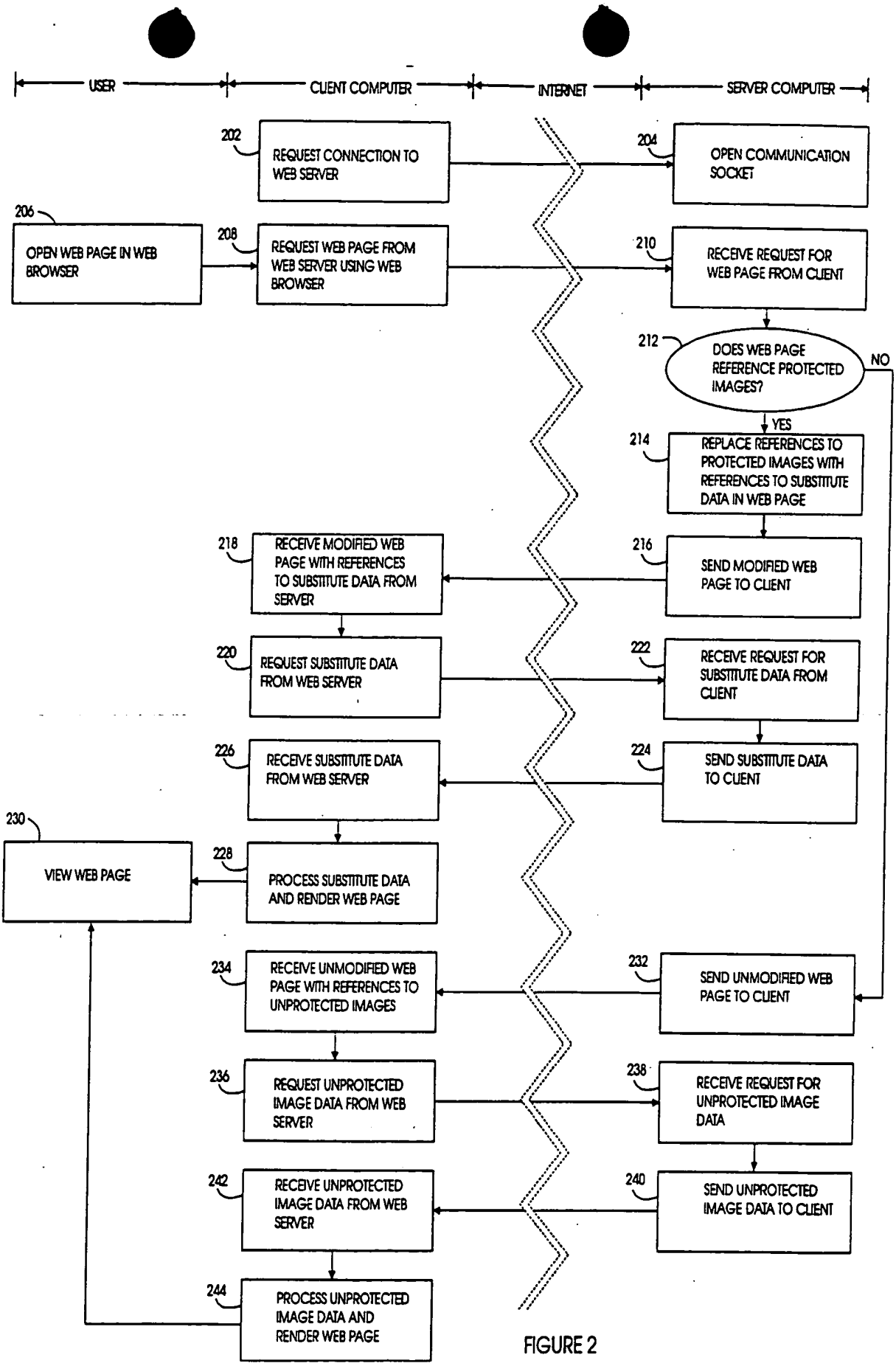
USER
CLIENT COMPUTER
INTERNET
SERVER COMPUTER
202
REQUEST CONNECTION TO WEB SERVER
204
OPEN COMMUNICATION SOCKET
206
OPEN WEB PAGE IN WEB BROWSER
208
REQUEST WEB PAGE FROM WEB SERVER USING WEB BROWSER
210
RECEIVE REQUEST FOR WEB PAGE FROM CLIENT
212
DOES WEB PAGE REFERENCE PROTECTED IMAGES?
NO
YES
214
REPLACE REFERENCES TO PROTECTED IMAGES WITH REFERENCES TO SUBSTITUTE DATA IN WEB PAGE
218
RECEIVE MODIFIED WEB PAGE WITH REFERENCES TO SUBSTITUTE DATA FROM SERVER
216
SEND MODIFIED WEB PAGE TO CLIENT
220
REQUEST SUBSTITUTE DATA FROM WEB SERVER
222
RECEIVE REQUEST FOR SUBSTITUTE DATA FROM CLIENT
226
RECEIVE SUBSTITUTE DATA FROM WEB SERVER
224
SEND SUBSTITUTE DATA TO CLIENT
230
VIEW WEB PAGE
228
PROCESS SUBSTITUTE DATA AND RENDER WEB PAGE
234
RECEIVE UNMODIFIED WEB PAGE WITH REFERENCES TO UNPROTECTED IMAGES
232
SEND UNMODIFIED WEB PAGE TO CLIENT
236
REQUEST UNPROTECTED IMAGE DATA FROM WEB SERVER
238
RECEIVE REQUEST FOR UNPROTECTED IMAGE DATA
242
RECEIVE UNPROTECTED IMAGE DATA FROM WEB SERVER
240
SEND UNPROTECTED IMAGE DATA TO CLIENT
244
PROCESS UNPROTECTED IMAGE DATA AND RENDER WEB PAGE

FIGURE 2

09:027 32602260

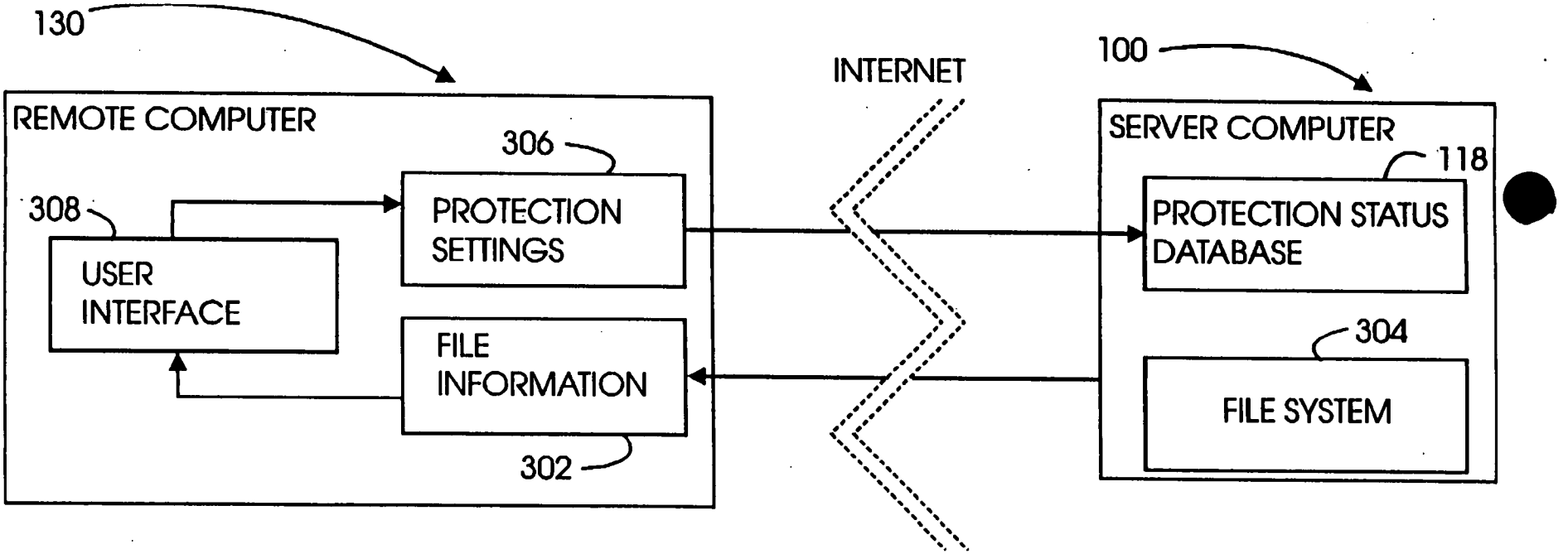

FIGURE 3

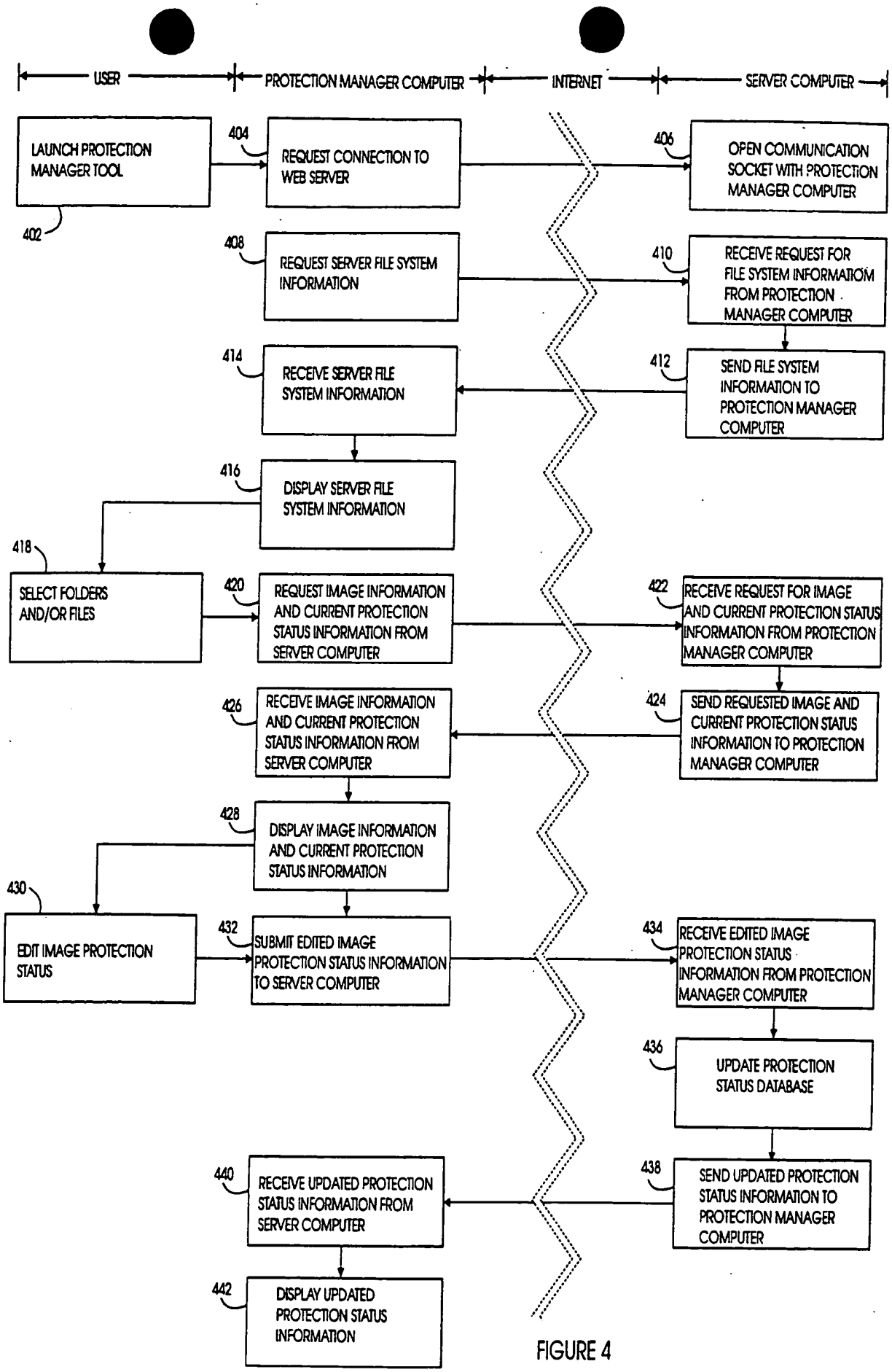
USER
PROTECTION MANAGER COMPUTER
INTERNET
SERVER COMPUTER
LAUNCH PROTECTION MANAGER TOOL
402
404
REQUEST CONNECTION TO WEB SERVER
406
OPEN COMMUNICATION SOCKET WITH PROTECTION MANAGER COMPUTER
408
REQUEST SERVER FILE SYSTEM INFORMATION
410
RECEIVE REQUEST FOR FILE SYSTEM INFORMATION FROM PROTECTION MANAGER COMPUTER
412
SEND FILE SYSTEM INFORMATION TO PROTECTION MANAGER COMPUTER
414
RECEIVE SERVER FILE SYSTEM INFORMATION
416
DISPLAY SERVER FILE SYSTEM INFORMATION
418
SELECT FOLDERS AND/OR FILES
420
REQUEST IMAGE INFORMATION AND CURRENT PROTECTION STATUS INFORMATION FROM SERVER COMPUTER
422
RECEIVE REQUEST FOR IMAGE AND CURRENT PROTECTION STATUS INFORMATION FROM PROTECTION MANAGER COMPUTER
424
SEND REQUESTED IMAGE AND CURRENT PROTECTION STATUS INFORMATION TO PROTECTION MANAGER COMPUTER
426
RECEIVE IMAGE INFORMATION AND CURRENT PROTECTION STATUS INFORMATION FROM SERVER COMPUTER
428
DISPLAY IMAGE INFORMATION AND CURRENT PROTECTION STATUS INFORMATION
430
EDIT IMAGE PROTECTION STATUS
432
SUBMIT EDITED IMAGE PROTECTION STATUS INFORMATION TO SERVER COMPUTER
434
RECEIVE EDITED IMAGE PROTECTION STATUS INFORMATION FROM PROTECTION MANAGER COMPUTER
436
UPDATE PROTECTION STATUS DATABASE
438
SEND UPDATED PROTECTION STATUS INFORMATION TO PROTECTION MANAGER COMPUTER
440
RECEIVE UPDATED PROTECTION STATUS INFORMATION FROM SERVER COMPUTER
442
DISPLAY UPDATED PROTECTION STATUS INFORMATION

FIGURE 4

08:02T 9202/20

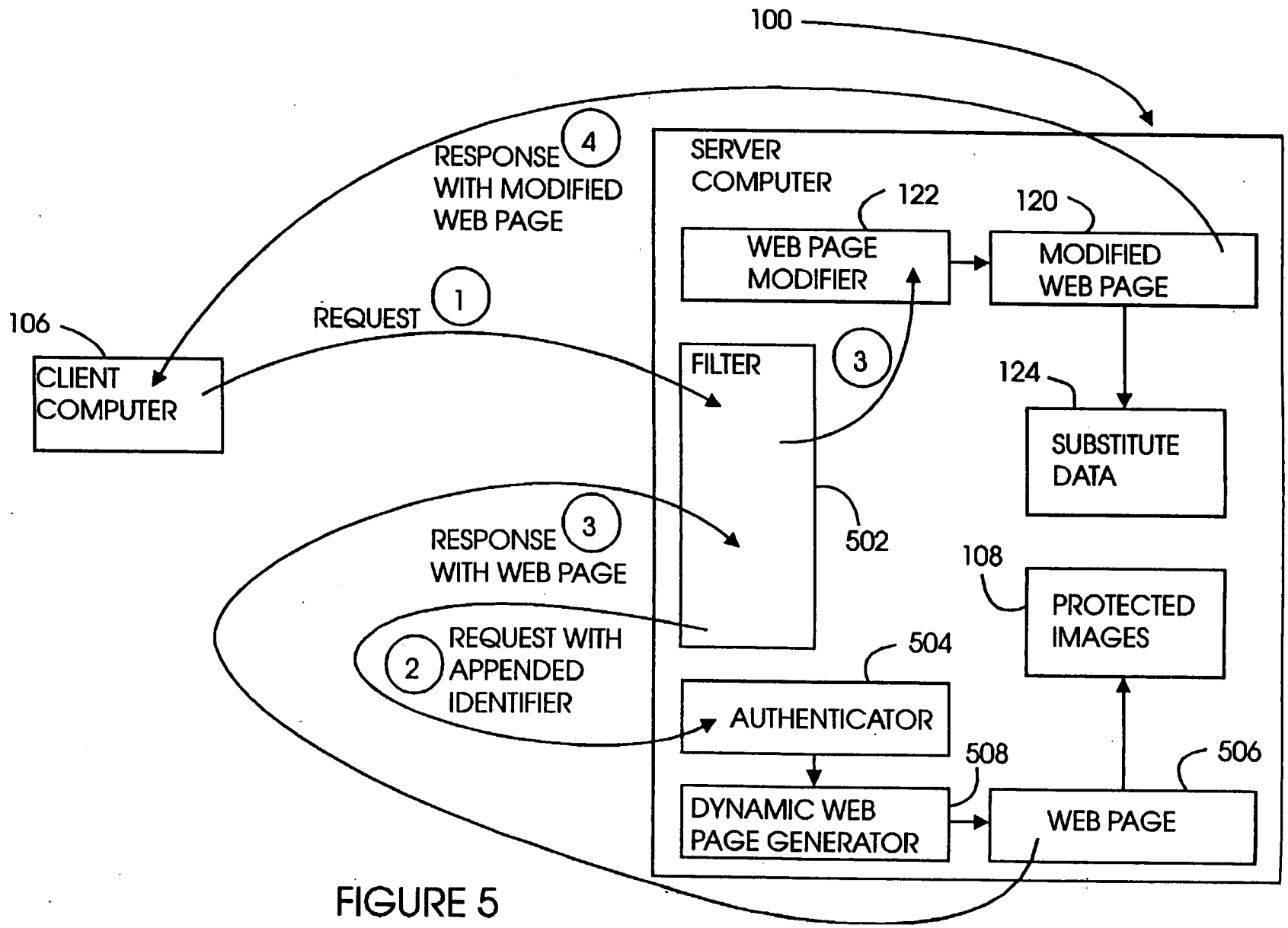

FIGURE 5

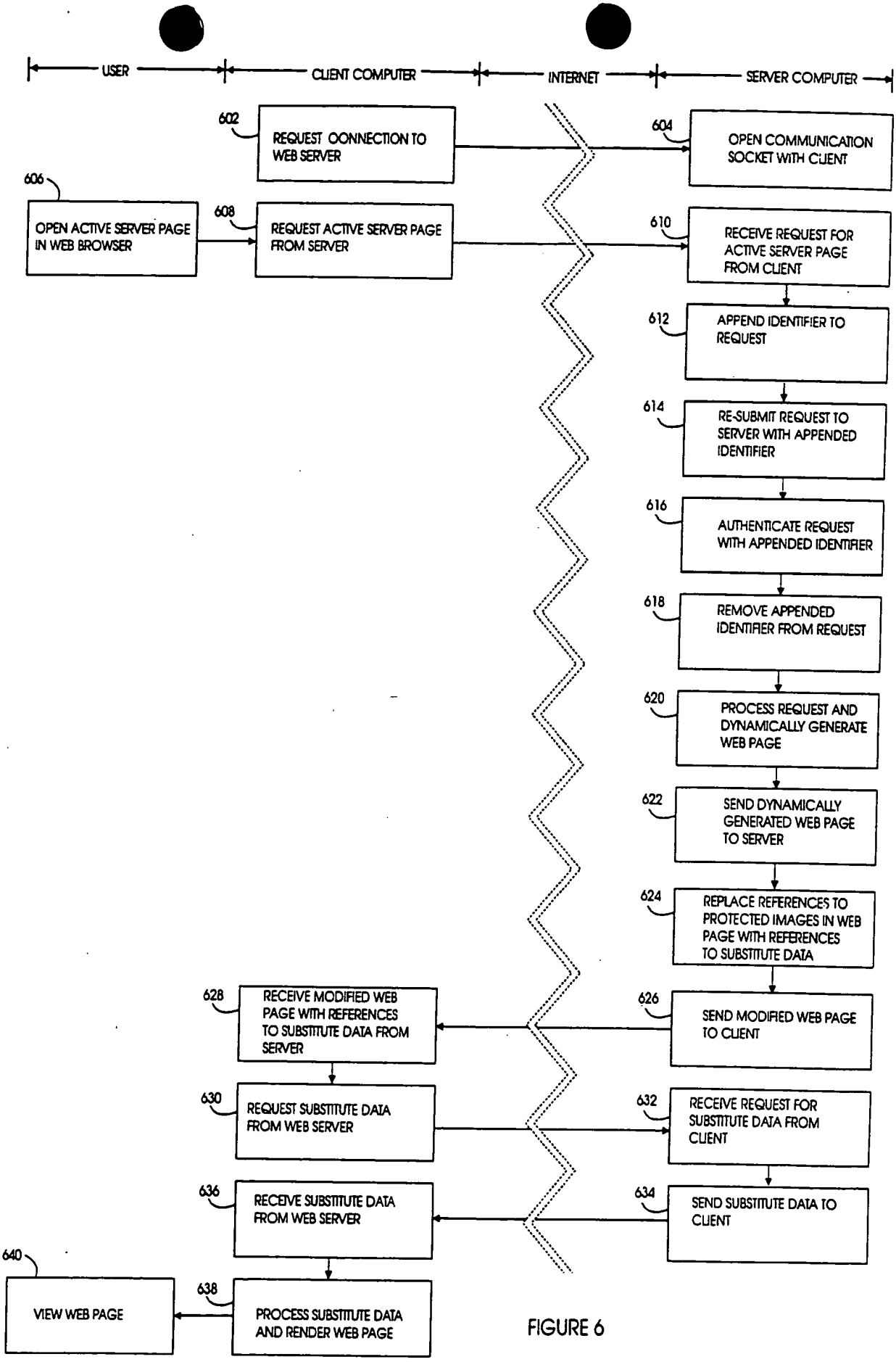
USER
CLIENT COMPUTER
INTERNET
SERVER COMPUTER
602
REQUEST CONNECTION TO WEB SERVER
604
OPEN COMMUNICATION SOCKET WITH CLIENT
606
OPEN ACTIVE SERVER PAGE IN WEB BROWSER
608
REQUEST ACTIVE SERVER PAGE FROM SERVER
610
RECEIVE REQUEST FOR ACTIVE SERVER PAGE FROM CLIENT
612
APPEND IDENTIFIER TO REQUEST
614
RE-SUBMIT REQUEST TO SERVER WITH APPENDED IDENTIFIER
616
AUTHENTICATE REQUEST WITH APPENDED IDENTIFIER
618
REMOVE APPENDED IDENTIFIER FROM REQUEST
620
PROCESS REQUEST AND DYNAMICALLY GENERATE WEB PAGE
622
SEND DYNAMICALLY GENERATED WEB PAGE TO SERVER
624
REPLACE REFERENCES TO PROTECTED IMAGES IN WEB PAGE WITH REFERENCES TO SUBSTITUTE DATA
626
SEND MODIFIED WEB PAGE TO CLIENT
628
RECEIVE MODIFIED WEB PAGE WITH REFERENCES TO SUBSTITUTE DATA FROM SERVER
630
REQUEST SUBSTITUTE DATA FROM WEB SERVER
632
RECEIVE REQUEST FOR SUBSTITUTE DATA FROM CLIENT
634
SEND SUBSTITUTE DATA TO CLIENT
636
RECEIVE SUBSTITUTE DATA FROM WEB SERVER
638
PROCESS SUBSTITUTE DATA AND RENDER WEB PAGE
640
VIEW WEB PAGE

FIGURE 6

09102T "3203260

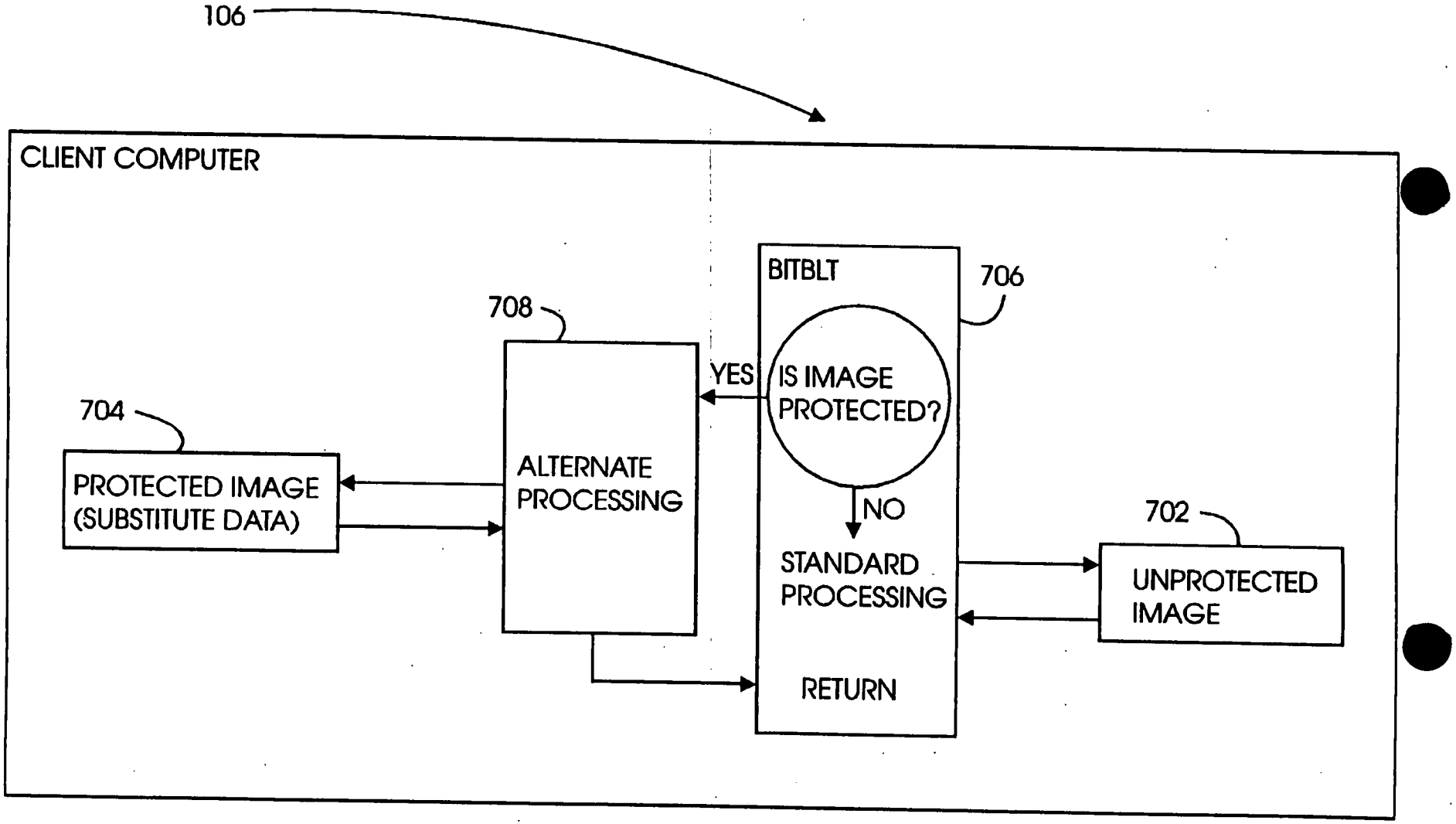

FIGURE 7

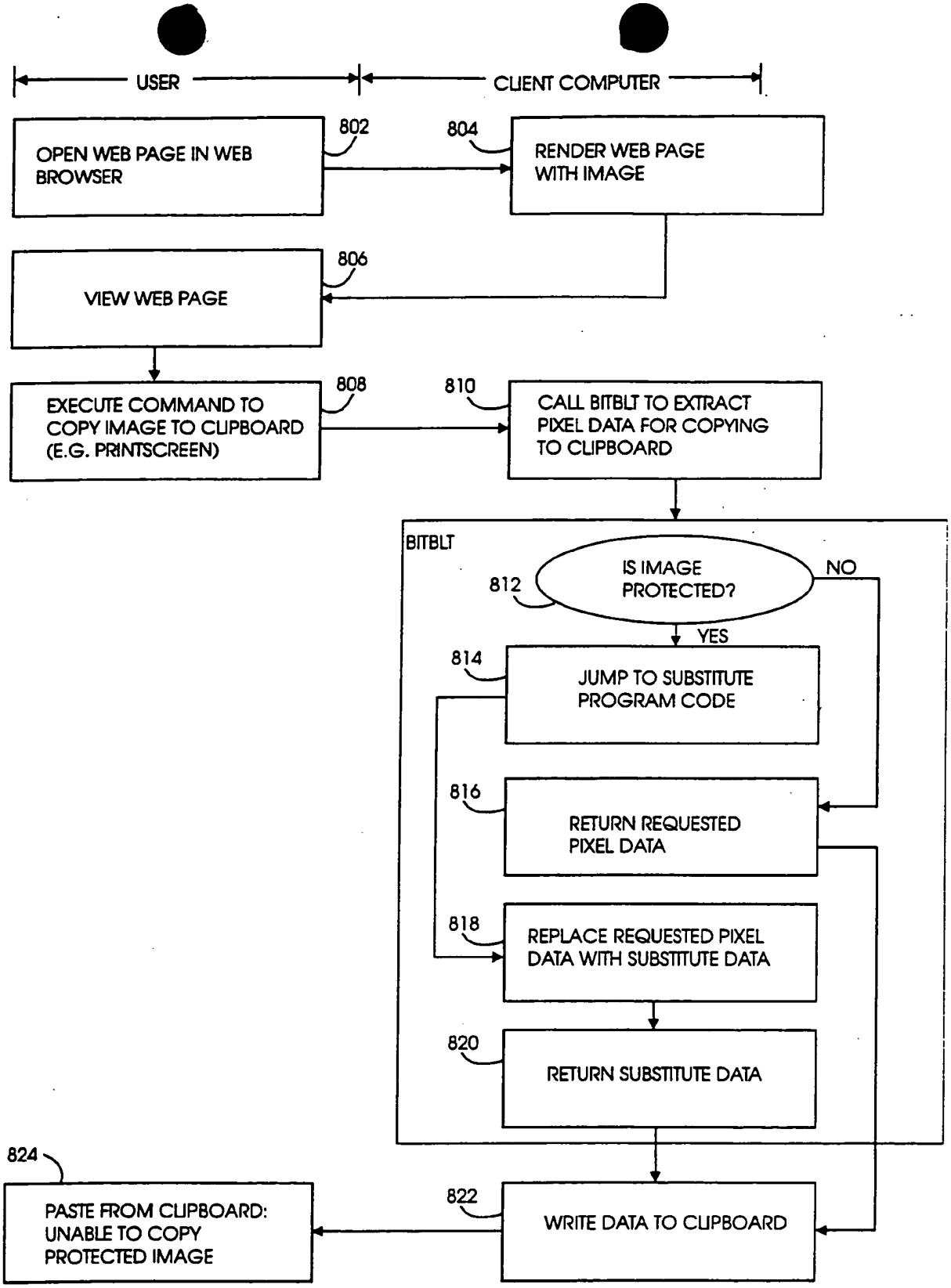
USER
CLIENT COMPUTER
OPEN WEB PAGE IN WEB BROWSER
802
804
RENDER WEB PAGE WITH IMAGE
VIEW WEB PAGE
806
EXECUTE COMMAND TO COPY IMAGE TO CLIPBOARD (E.G. PRINTSCREEN)
808
810
CALL BITBLT TO EXTRACT PIXEL DATA FOR COPYING TO CLIPBOARD
BITBLT
IS IMAGE PROTECTED?
812
NO
YES
814
JUMP TO SUBSTITUTE PROGRAM CODE
816
RETURN REQUESTED PIXEL DATA
818
REPLACE REQUESTED PIXEL DATA WITH SUBSTITUTE DATA
820
RETURN SUBSTITUTE DATA
824
PASTE FROM CLIPBOARD: UNABLE TO COPY PROTECTED IMAGE
822
WRITE DATA TO CLIPBOARD

FIGURE 8

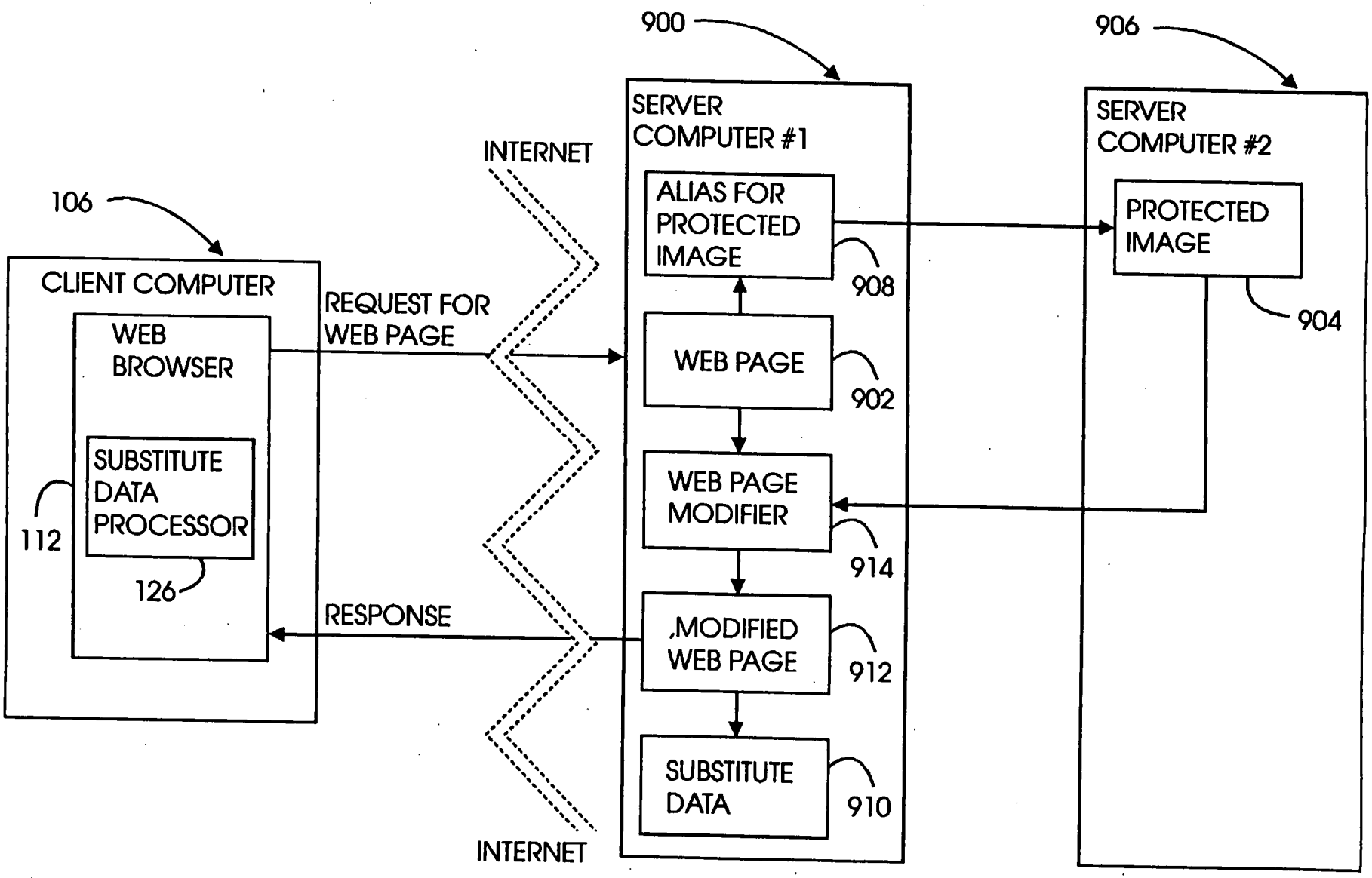
900
906
SERVER COMPUTER #1
SERVER COMPUTER #2
INTERNET
106
CLIENT COMPUTER
ALIAS FOR PROTECTED IMAGE
908
PROTECTED IMAGE
904
REQUEST FOR WEB PAGE
WEB BROWSER
WEB PAGE
902
SUBSTITUTE DATA PROCESSOR
112
126
WEB PAGE MODIFIER
914
RESPONSE
MODIFIED WEB PAGE
912
SUBSTITUTE DATA
910
INTERNET

FIGURE 9

09:827 32202268

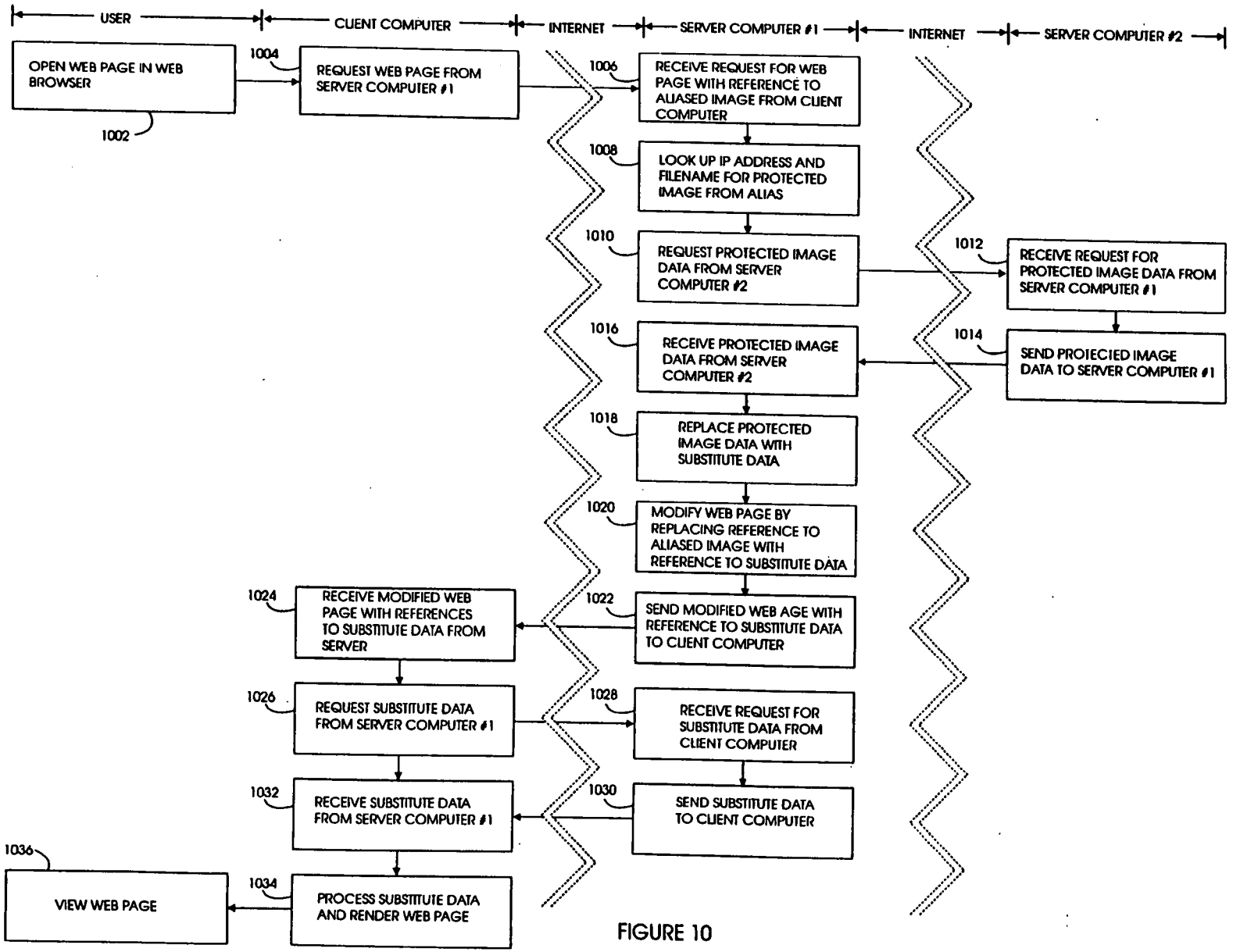

FIGURE 10

09/102,220

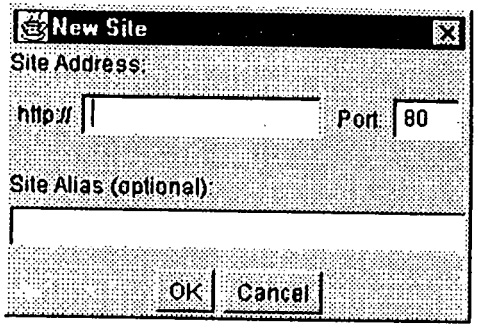

FIGURE 11

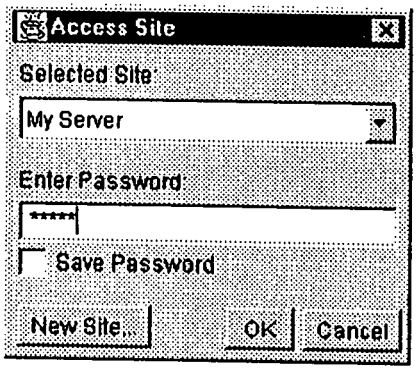

FIGURE 12

09:02T 9220626

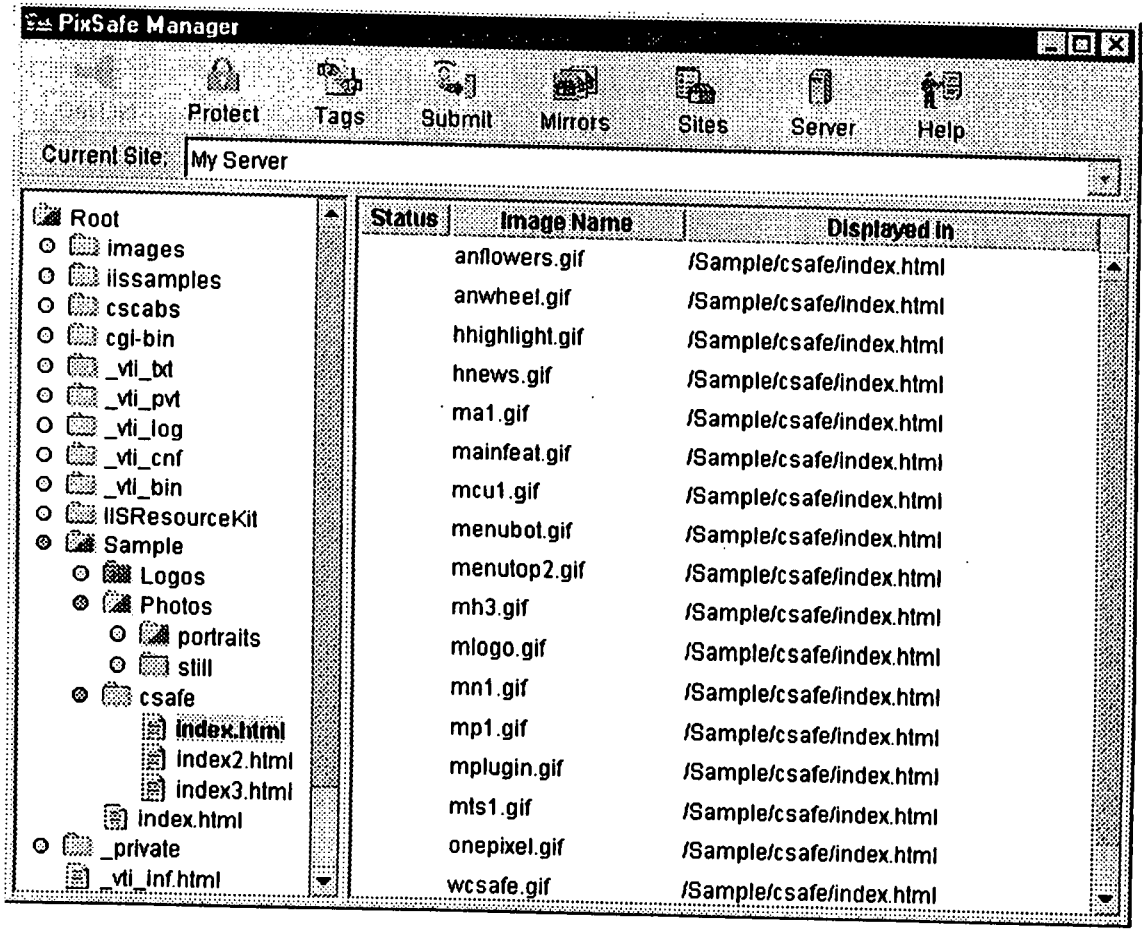

FIGURE 13

FIGURE 14

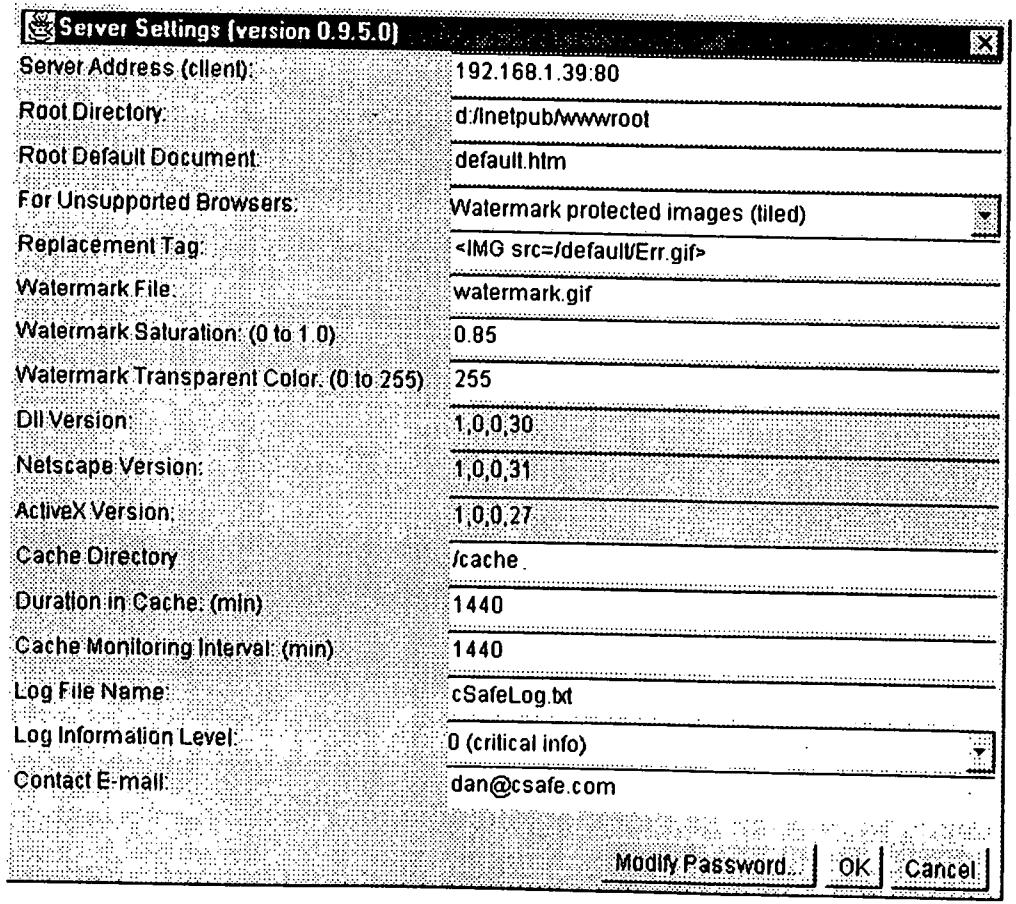

FIGURE 15

09:027 92E82260

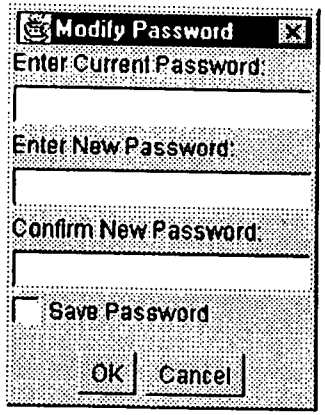

FIGURE 16

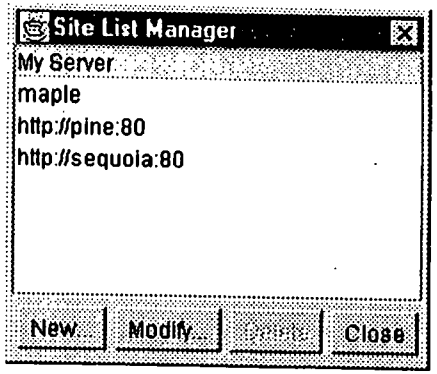

FIGURE 17

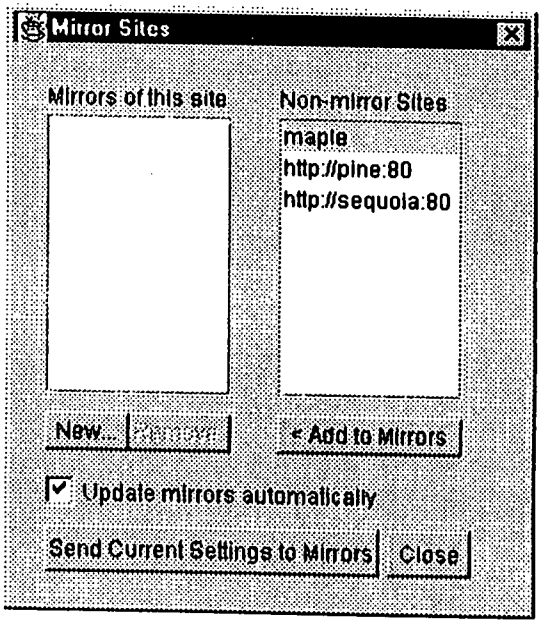

FIGURE 18

001.027-93508260

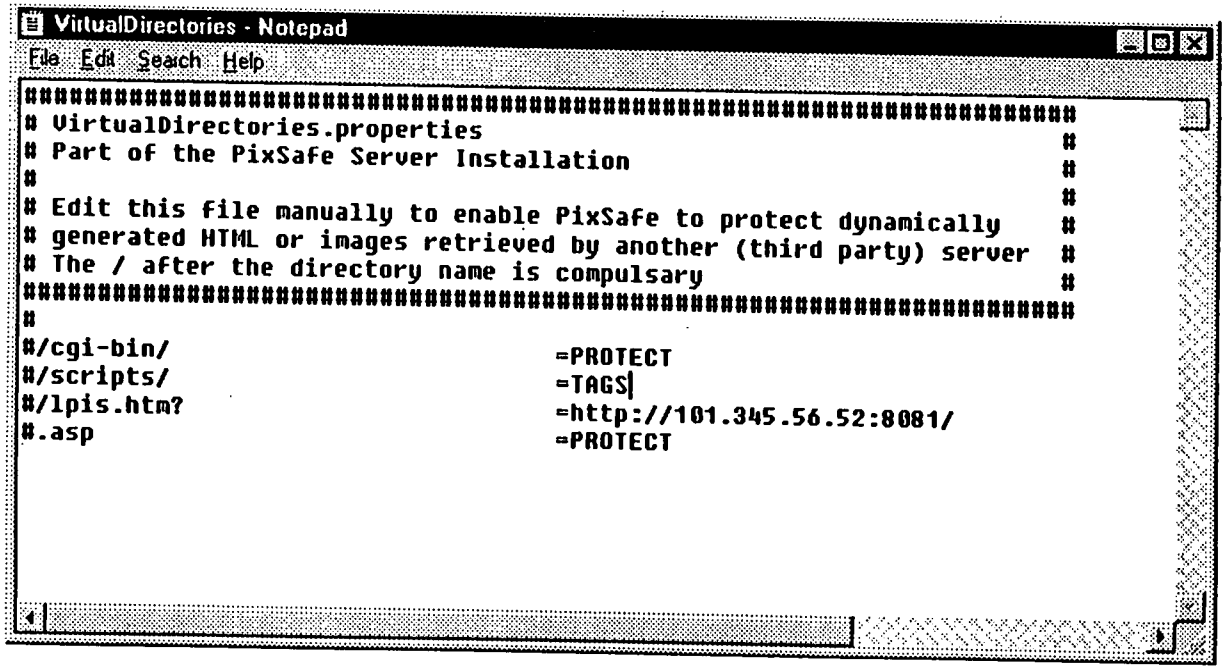

FIGURE 19